CRYPTOCOTYLE LINGUA (CREPLIN, 1825), FISCHOEDER, 1903, IN A DOG IN ENGLAND

BY

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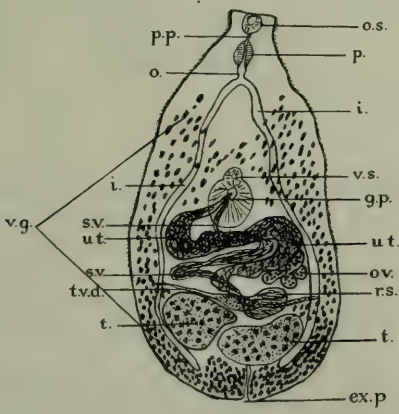
Three specimens of this small fluke were recovered from a dog killed in the Dogs' Home, Liverpool.



Cryptocotyle lingua, ventral view. *ex.p.*—excretory pore; *g.p.*—genital pore; *i*—intestine; *œ*—oesophagus; *o.s.*—oral sucker; *ov*—ovary; *p*—pharynx; *p.p.*—prepharynx; *r.s.*—receptaculum seminis; *s.v.*—vas deferens and seminal vesicle; *t*—testis; *t.v.d.*—transverse vitelline duct; *ut*—uterus; *v.g.*—vitelline glands; *v.s.*—ventral sucker. × 54.

The following table sets out the principal dimensions and anatomical characters of the three specimens:—

TABLE

	Spec. 1	Spec. 2	Spec. 3
Length and Breadth ...	1·4 × 0·7 mm.	1·3 × 0·67 mm.	1·5 × 0·75 mm.
Oral sucker	108μ	80μ	96μ
Pharynx	76μ	76 × 76μ	72 × 72μ
Oesophagus	80μ	60μ ?	? —
Bifurcation of intestine ...	260μ from anterior end	220μ from anterior end	? —
Genital sucker	—	160μ	148μ
Testes	Right testis anterior	Right testis anterior	Right testis anterior
Ovary	3 lobes in line, 260 × 68μ, on left	4 or 5 lobes grouped together about 120μ across, on left	3 or 4 lobes grouped together about 128μ across, on left
Vitellaria	Meet anterior to ventral sucker. Left side runs as far as gut fork. Right not so far	Nearly meet anterior to sucker and a few follicles about reach gut fork	Do not meet anterior to sucker and do not reach gut fork on either side
Eggs	50 × 30μ	48 × 24μ	48 × 28μ

With the exception of the relative positions of the testes and ovary, the worms closely agree with the full description given by Linton (1915). In Linton's drawing the left testis is figured as lying diagonally in front of the right testis, and the ovary is on the right side. In the present material the reverse is the case, viz., the right testis is slightly in front of the left and the ovary is on the left.

Ransom (1920), in defining the genus *Cryptocotyle*, states: 'Testes near posterior end of body, irregularly oval or globular and usually slightly lobed, or right testis obliquely behind the left. Ovary irregularly oval, or usually lobed, commonly like a clover leaf, situated on the right side of the median line in front of the seminal receptacle.' If this definition is adhered to, it will necessitate placing the present material in a new genus, which does not seem

advisable when it is so close to previously described specimens. The above points seem to be too detailed for generic distinction, especially when it is borne in mind that in other flukes of undoubtedly the same species the positions of testes and ovary frequently vary, and hence in these cases are not even of specific value. For instance, in a collection of *Fasciola hepatica* from one host, although the ovary is usually on the right, occasionally a specimen is found with it on the left; a similar instance has recently been observed by the writer in *Gastrodiscus aegyptiacus* and *Gastrodiscus secundus*. In both these species the testes are diagonally placed and either the left or right testis may be anterior, and the ovary also lies either on the right or left side, being always on the opposite side to the posterior testis (in this genus the ovary is posterior to the testes). The present variation is of exactly the same character, the ovary being on the opposite side to the anterior testis (ovary anterior to testes in the genus *Cryptocotyle*). A further reason against making the side on which the ovary lies of generic value is that Nicoll (1907), in defining the same genus, states: 'Ovary irregularly lobed, on right or left side of middle line.'

It is also apparent from the study of the present specimens that the distribution of the vitellaria is subject to considerable variation, and that Ransom's definition is too restricted in this respect. Ransom's definition, therefore, should be slightly emended so as to allow the inclusion of the present specimens in the species *C. lingua*, which appears preferable to making a new genus on admittedly variable characters.

Occurrence. This worm has been recorded from many fish-eating birds in Europe and North America, and once in the dog by Wigdor (1918), at Detroit, Michigan, U.S.A., as the type of a new genus *Hallum*. Ransom (1920) states that he has examined some of Wigdor's material, and he places the worm in the species *Cryptocotyle lingua*. The discovery of this worm in England makes it appear probable that it is more common in dogs than the record of its occurrence in this host would lead one to suppose, and that it has often been missed on account of its minute size.

REFERENCES

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